

IN THE CLAIMS:

Claim 1 (canceled)

Claims 2-31 (previously canceled)

32. (new) A vessel filter for capturing blood clots while enabling blood flow therethrough, the vessel filter comprising a mounting section at opposing end regions of the filter and configured to engage a wall of a vessel, the mounting section having curved regions at each end region formed by a portion extending back toward a center line of the filter after extending away from the center line of the filter, the mounting section having a first transverse dimension, a first filtering section and a second filtering section each having a transverse dimension less than the first transverse dimension, each filtering section having a converging region, the converging region converging at a cylindrical support.

33. (new) The vessel filter of claim 32, further comprising vessel engaging members extending from the mounting section to anchor the vessel filter.

34. (new) The vessel filter of claim 32, wherein the first and second filtering sections converge at opposite ends of the same cylindrical support.

35. (new) The vessel filter of claim 32, wherein the first and second filtering sections each comprise a plurality of curved regions formed by portions extending back toward the center line of the filter.

36. (new) The vessel filter of claim 32, wherein the first and second filtering sections each comprise a plurality of curved filter regions, wherein the curved filter regions of the first filtering section are located closer to a center point of the filter than a first end of the mounting section and the curved filter regions of the second filtering section are located closer to the center point of the filter than an opposing end of the mounting section.

37. (new) The vessel filter of claim 32, wherein the first and second filtering sections each comprise a series of wires forming loops extending in different directions.

38. (new) A vessel filter for capturing blood clots while enabling blood flow therethrough, the vessel filter comprising a mounting section having first and second curved end regions forming part of a closed curve and configured to engage a wall of a vessel, a first filtering section, and a second filtering section, the first filtering section formed by members extending inwardly with respect to the first end of the mounting section and the second filtering section formed by members extending inwardly with respect to the second end of the mounting section, each filtering section including a bend in the members forming the filtering section, at least some of the bends in the first filtering section extending in a first direction opposite a direction of the bends in the second filtering section.

39. (new) The vessel filter of claim 38, further comprising vessel engaging members extending from the mounting section.

40. (new) The vessel filter of claim 39, wherein the members of the first filtering section converge to a first converging region and the members of the second filtering section converge to a second converging region.

41. (new) The vessel filter of claim 38, wherein the members of the first filtering section converge to a first converging region and the members of the second filtering section converge to a second converging region.

42. (new) The vessel filter of claim 41, wherein the filtering sections are positioned closer to a center of the vessel filter than the respective end of the mounting section.

43. (new) A vessel filter comprising a longitudinal axis, first and second mounting sections and first and second filtering sections, the filtering sections being positioned axially inwardly with respect to at least a portion of the mounting sections such that the filtering sections are closer to a center of the filter, first and second opposing end regions of the mounting section curving inwardly to form part of closed curve sections devoid of exposed free ends.

44. (new) The vessel filter of claim 43, further comprising a plurality of anchoring members extending from the mounting section.

45. (new) The vessel filter of claim 43, wherein the filtering section is configured to direct blood clots to the center of the filter in either longitudinal orientation in the vessel.

46. (new) The vessel filter of claim 45, wherein the filter is composed of shape memory material and movable from a compressed configuration within a delivery member to a radially expanded configuration within the vessel.

47. (new) A vessel filter for capturing blood clots while enabling blood flow therethrough, the vessel filter comprising a mounting section at a first end region and having a first transverse dimension, and a filtering section at a second opposing end region having a smaller transverse dimension, the filtering section tapering towards the second opposing end region and terminating in a converging region at a first cylindrical support forming the tip of the vessel filter, and a second cylindrical support formed at a first end, the vessel filter composed of shape memory material and movable from a compressed configuration within a delivery member to a radially expanded configuration within the vessel so the mounting section retains the vessel filter within the vessel.

48. (new) The vessel filter of claim 47, wherein the filtering section includes a plurality of members having an inwardly directed and an outwardly directed component.

49. (new) The vessel filter of claim 47, further comprising a plurality of anchoring members extending from the mounting section.